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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,828	05/14/2001	Stephen S. Agnew	723-010030-US (101)	9153

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PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 06824

EXAMINER

NGUYEN, CHANH DUY

ART UNIT	PAPER NUMBER
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2675

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DATE MAILED: 05/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,828

Applicant(s)

AGNEW, STEPHEN S.

Examiner

Chanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites "the apparatus of claim 11, further comprising". Claim 11 does not further define the limitation its depending on because claim 11 depend upon itself. In view in definiteness, no art rejection is applied to claims 11 and 12 since it does not make sense.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-10 , 13 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Graham et al (U.S. Patent No. 6,351,260).

As to claim 1, Graham discloses a combined touch panel and light for use with a display having a substantially planar surface (see column 4, line 64 through column 5,

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line 19) including a source of illumination (102), a light guide (e.g., waveguide sections 104, 110) for receiving light from the source of illumination and for propagating in a direction substantially parallel to a display surface of the display (see Figures 1-4 and see column 6, lines 3-68). Graham teaches at least one sensor (e.g., light receiver 112) for detecting an interruption in propagation of light in a direction substantially parallel to the display surface (see column 4, lines 25-37).

As to claim 2, Graham clearly teaches a light guide including lenses (116); see column 4, lines 38-49.

As to claim 3, Graham teaches the light guide distributing the illumination so that at least a portion of the illumination travels in two perpendicular directions (i.e. horizontal light beam 418 perpendicular to vertical light beam 420 as shown in figure 4).

As to claim 4, Graham teaches the light guide (wave guide section) distributing the light in a plurality of different paths (light beam), and sensor (light receiver) being positioned to receiving information from at least one of the path; see Figures 1 and 4.

As to claim 5, Graham clearly teaches the paths (light beam) being substantially parallel; see light beam 106 of Figure 1 or light beam 418 of Figure 4.

As to claims 6-7, Graham teaches the illumination radiating from one point in substantially linear manner adjacent at least one edge of the display (i.e. light source is LED as shown in Figure 4; see column 7, lines 15-19).

As to claims 8-10, an analog sensors and a threshold sensors disposed along at least one edge of the display surface is taught by Graham as shown Figure 4 and column 7, lines 33-54.

As to claim 13, Graham teaches a light emitting diode light source (see column 7, lines 14-27).

As to claim 17, Graham clearly teaches the apparatus being sized, shaped and positioned to illuminate the display panel; see column 5, lines 1-45.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 14 and 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham in view of Kubo et al (U.S. Patent No. 6,456,279).

As to claim 14, note the discussion of Graham above, Graham light guide including a substantially planar member extending over the display surface. Kubo teaches a light guide (2) including a planar member extending over the display surface (see Figure 1 and column 8, lines 1-25. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have substituted the guide light as taught by Kubo to the light guide of Graham so that a high quality image displayed can be obtained and the brightness of the screen can be improved (see column 3, lines 42-49 of Kubo).

As to claim 18, Kubo clearly teaches liquid crystal display panel (1).

As to claims 19-20, Kubo teaches both front light and back light liquid crystal display panel. For example, Figure 10 shows well-known backlight light liquid crystal display panel as well as front light liquid crystal display panel as shown in Figure 1.

As to claims 21-26, the limitations a portable electronic device, a personal digital assistant, a mobile telephone recited in claims 21-26 are taught by Kubo; see column 8, lines 51-56 and column 28, lines 16-17.

7. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham in view of Selbrede (U.S. Patent No. 5,319,491).

As to claim 15, note the discussion of Graham above, Graham does not mention a resilient, deformable light guide. Selbrede teaches the use of a well-known deformable elastomer layer light guidance (148) to the optical display panel; see column 10, lines 46-55. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the deformable elastomer layer light guidance to the guide light of Graham so as to prevent unwanted distortions of the light beam (see column 10, lines 46-55 of Selbrede).

As to claim 16, Graham teaches a touch input device (300) which has characteristic deformable placed over the display screen (208) which has light guide. Even the reference of Kubo teaches a well-known feature deformable layer disposed over the light guide as recited in the claim.

Inquiries

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Steven Saras can be reached at 305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231


or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


C. Nguyen
April 30, 2003


CHANH NGUYEN
PRIMARY EXAMINER